



## ENTRY LEVEL COMPETENCIES AND CAPABILITIES

<b>A1</b>	<b>Basic Acquisition I</b> A minimum of 24 hours of coursework in basic acquisition that enables the individual to: <ul style="list-style-type: none"> <li>– Explain the requirements development process;</li> <li>– Define concept selection;</li> <li>– Use a technology development process;</li> <li>– Perform a business strategy for market research (FAR Parts 10 and 12) to include socio-economic considerations.</li> </ul>
<b>Management Process</b>	
Knowledge of government-wide and agency-specific acquisition policies that support assigned missions and functions; understanding of how agency acquisition professionals balance risk; understanding of the many factors that influence cost, schedule, and performance; attention to lessons learned; understanding of metrics needed to manage programs and projects that deliver quality, affordable, supportable, and effective systems/products.	
<b>1 Requirements Process</b>	
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<b>2 Concept Selection Process (Pre-program/pre-project) - Concept Selection is selecting the idea(s) which best satisfy the project design.</b>	
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<b>3 Technology Development Process (Pre-program /Pre-project)</b>	
Ability to expand, if applicable, together with the user, "customer needs" into system requirements: <ul style="list-style-type: none"> <li>▪ Performance parameters objectives and thresholds (the difference being Trade space)</li> <li>▪ Affordability constraints;</li> <li>▪ Scheduling constraints;</li> <li>▪ Technical constraints;</li> <li>▪ Environmental issues;</li> <li>▪ Joint, combined and interagency interoperability</li> </ul>	A1
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<b>7 Market Research (including Socioeconomic Considerations)</b> - Market research is the process of systematic gathering, recording and analyzing of data about <a href="#">customers</a> , <a href="#">competitors</a> and the <a href="#">market</a> . Market research can help create a <a href="#">business plan</a> , launch a new product or service, fine tune existing products and services, expand into new markets etc.	
Ability to perform, under instruction, using FAR Part 10 and 12 (if applicable), a business strategy for market research (including socioeconomic considerations), the application of dual-use technologies to market research (including socioeconomic considerations), and use of commercial items within market research (socioeconomic considerations).	A1
<b>18 Prepare &amp; Issue Solicitation</b>	
Ability to develop a comprehensive program specification and statement of work that fully and correctly defines the program, addressing roles and missions of the government and contractor.	A1

<b>B1</b>	<b>Project Management I</b> A minimum of 24 hours of coursework in basic project management that enables the individual to: <ul style="list-style-type: none"> <li>– Prepare project components to the task level in preparation for developing the Work Breakdown Structure (WBS)</li> <li>– Define requirements in terms of performance-based outcomes, where appropriate;</li> <li>– Explain the role of an estimate in Total Ownership Cost (TOC)/Life Cycle Cost process;</li> <li>– Define the risk and opportunity management process;</li> <li>– Explain systems life cycle management concepts used for information systems;</li> <li>– Explain the need for a comprehensive Test and Evaluation (T&amp;E) program;</li> <li>– Explain when to implement alternative logistics support.</li> </ul>
<b>4 Core Management Skills &amp; Processes</b>	
Knowledge of the process for the development of the program and defining program scope, environmental, safety, and occupational health (ESOH), and security measures.	B1
Ability to participate, under instruction, in the preparation of a plan for total Life-cycle system management (Integrated Master Plan) that addresses phased inputs, outputs, deliverables for each phase, and internal & external project/program technical reviews, Congressional processes, audits, and how various project/program functions will be performed and managed.	B1
Ability to participate, under instruction, in the preparation of an integrated master schedule, employing schedule network tools and techniques, work loading methods, and using agency project management software to produce a schedule in one or more desired formats. Inputs to this process may include, e.g., <ul style="list-style-type: none"> <li>▪ Activity duration estimates</li> <li>▪ Work Breakdown Schedule</li> <li>▪ Project baseline</li> <li>▪ Resource calendars</li> <li>▪ Resource requirements</li> <li>▪ Activities parameters</li> <li>▪ Project integrated master plan</li> </ul>	B1
Ability to prepare, under instruction, a program and contract WBSs structuring/tailoring the WBS to the program and applying elements of scheduling, risk management, cost estimating, contracting, EVM, etc.	B1
Knowledge of the importance of technical reviews.	B1
Knowledge of the structure of a management philosophy for all program plans and actions, and production in particular that stresses eliminating defects by applying business process re-engineering methods for continuous improvement.	B1
Knowledge of the value of the PM planning for resource needs for management.	B1
Knowledge of the need for financial planning and execution reviews.	B1
<b>5 Life-Cycle Cost (Total Ownership Cost)</b>	
<b>Management (OMB A-94)</b> - A life cycle cost analysis calculates the <a href="#">cost</a> of a <a href="#">system</a> or <a href="#">product</a> over its entire life span; Total cost of ownership (TCO) is a financial estimate designed to help consumers and enterprise managers assess direct and indirect costs related to the purchase of any capital investment, such as (but not limited to) computer software or hardware. A TCO assessment ideally offers a final statement reflecting not only the cost of purchase but all aspects in the further use and maintenance of the equipment, device, or system considered.	



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Recognize the role and nature of an estimate of Total Ownership Cost (TOC) prepared in Agency format, and the need to revisit and ensure it is consistent with prior OMB A-94 and PART analysis as appropriate, considering full program scope in applying cost estimating techniques/tools to cases involving management decisions, e.g., contractor versus government logistics support: <ul style="list-style-type: none"> <li>Recognize estimating techniques/tools for developing rough cost estimates (Engineering Estimates, Parametric, etc.)</li> <li>Recognize cost estimating techniques/tools to 1.) Estimates of ECP and modification costs, 2.) Estimate of project or program cost, and 3.) Life Cycle Cost/TOC estimation for project/program.</li> <li>Recognize an associated risk level for all cost estimates.</li> <li>Recognize impact of various reduced funding profiles.</li> <li>Recognize costs within each applicable appropriation.</li> <li>Recognize the need for assumptions, and why they should be valid.</li> <li>Recognize cost policies and practices.</li> <li>Participate, under instruction, in the preparation of a business case analysis applying cost benefit trade-offs to program.</li> <li>Recognize the need for appropriate indices for then year and constant year estimates.</li> </ul>	B1
Knowledge of the reasons for application of Department/Agency financial policies and directives that are applicable to the program, such as developing out-year financial plans, budgets estimated in Departmental/Agency formats, including impacts of Earned Value Management.	B1
<b>6 Risk and Opportunity Management</b> - Risk management is the process of <a href="#">measuring</a> , or <a href="#">assessing</a> , <a href="#">risk</a> and developing <a href="#">strategies</a> to manage it. Traditional risk management focuses on risks stemming from physical or legal causes (e.g. natural disasters or fires, accidents, death, and lawsuits).	
Knowledge of the risk/opportunity management process which includes planning, assessment (identification and analysis), handling, and monitoring, all to be integrated and continuously applied throughout the program.	B1
Knowledge of the value of decision analysis in the selection of risk handling options/opportunities and the need to fold those options into a detailed Integrated Master Plan and Integrated Master Schedule (IMP/IMS). <ul style="list-style-type: none"> <li>Recognizes the need to identify and prioritize risk events to be handled.</li> <li>Recognizes the need to select handling actions to be included in project/program.</li> <li>Recognizes the need for mitigation strategies based on risk assessments.</li> <li>Recognizes the need to evaluate mitigation strategy performance.</li> <li>Has knowledge of application of critical chain management tools and techniques to balance risks with available resources.</li> </ul>	B1
Knowledge of the value of an organizational structure/method to track and manage risk/opportunities that has knowledge of a process to use the program WBS to develop a risk management organization for the project including contractor representatives.	B1
Knowledge of how a risk/opportunity management program is to be used within the management of the program.	B1
<b>10 Technical Management Process</b>	
Knowledge of the nature of the decision analysis methods that will provide the basis for evaluating and selecting alternatives for decision making. Decision Analysis involves selecting the criteria for the decision and the methods to be used in conducting the analysis.	B1
Ability to develop a plan for Technical Assessment that measures technical progress and the effectiveness of plans and requirements. Activities within Technical Assessment include those associated with <a href="#">Technical Performance Measurement</a> and the conduct of technical reviews.	B1
Knowledge of systems life cycle management concepts used to plan, develop, implement, operate, and maintain information systems.	B1
Ability to participate in, under instruction, the execution of a Risk/Opportunity Management plan and methods applicable to a systems engineering context that examines the risks of deviating from the program plan. It will examine all aspects of the program and their relationships. The plan and methods should integrate design (performance) requirements with other lifecycle issues such as manufacturing, operations, <a href="#">environment, safety, and occupational health considerations</a> , and support.	B1
Knowledge of Configuration Management methods and best practices to establish and maintain consistency of a product's attributes with its requirements and product configuration information.	B1
Ability to identify the key processes employed in interface management, including the ability to trace system requirements through the software allocation architecture and use of an interface matrix.	B1
Ability to describe the content of a plan for Technical Data Management.	B1
<b>11 Technical Process</b>	
Knowledge of the nature of the requirements development process for working with the user to establish and refine operational needs, attributes, performance parameters, trade-offs, and constraints that flow from the needed capabilities, and then ensure that all relevant requirements are addressed.	B1



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Ability to develop a process to monitor/coordinate/participate in the <a href="#">validation procedures</a> that answers the question of "Did you build the right thing."	B1
Ability to establish a process of obtaining sets of logical solutions to improve knowledge of the defined requirements and the relationships among the requirements.	B1
Ability to define a process for monitoring and selecting Design Solution that translates the outputs of the Requirements Development and Logical Analysis processes into alternative design solutions and selects a final design solution.	B1
Knowledge of the value of a process for monitoring the integration procedures for incorporating the lower level system elements into a higher-level system element in the physical and logical architecture. The plan or strategy for the Integration process, including the assembly sequence, may impose constraints on the design solution.	B1
Knowledge of processes for monitoring the integration procedures for incorporating the lower level system elements into a higher-level system element in the physical and logical architecture. The plan or strategy for the Integration process, including the assembly sequence, may impose constraints on the design solution.	B1
<b>Test and Evaluation (T&amp;E):</b> Knowledge of efficient and cost effective methods for planning, monitoring, conducting, and evaluating tests of prototype, new, or modified systems equipment or materiel, including the need to develop a thorough T&E strategy to validate system performance through measurable methods that relate directly to requirements and to develop metrics that demonstrate system success or failure.	
<b>12 Integration of T&amp;E</b>	
Ability to determine the need for a comprehensive T&E program including Modeling & Simulation.	B1
<b>13 Test and Evaluation Strategy (TES)</b>	
Knowledge of the value of a comprehensive Test & Evaluation Strategy (TES) and how this document can evolve into the Test & Evaluation Master Plan TEMP.	B1
<b>Life Cycle Logistics (LCS):</b> Knowledge of performance-based logistic efforts that optimize total system lifecycle availability, supportability, and reliability/maintainability while minimizing cost and logistic footprint, and interoperability.	
<b>15 Life-cycle Logistic (LCL) Management, Product Support, and Interoperability</b>	
Ability to implement alternative logistics support practices, including supply chain functions, best public sector and commercial practices and technology solutions.	B1
Ability to determine the need for a modular open systems approach (MOSA) where interoperability is a key LCL facilitator.	B1

C1	<b>Leadership and Interpersonal Skills I</b> A minimum of 16 hours of coursework in employing effective leadership and interpersonal skills that enables the individual to: <ul style="list-style-type: none"><li>– Demonstrate effective oral and written communications;</li><li>– Explain the roles of members in a working group or project oriented team;</li><li>– Demonstrate satisfactory customer service;</li><li>– Manage conflict ;</li><li>– Demonstrate accountability for results.</li></ul>	
<b>Leadership/Professional</b>		
Ability to lead/manage a project team to satisfactory achievement of project goals.		
<b>27 Leadership/Professional Skills</b>		
	These competencies comprise a foundation for effective entry-level program/project manager-related responsibilities: <ul style="list-style-type: none"><li>▪ Problem Solving -Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and make recommendations.</li><li>▪ Conflict Management -Manages and resolves conflicts, grievances, confrontations, or disagreements in a constructive manner to minimize negative personal impact.</li><li>▪ Interpersonal Skills - Shows understanding, courtesy, tact, empathy; develops and maintains relationships; deals with difficult people; relates well to people from varied backgrounds; is sensitive to individual differences.</li><li>▪ Resilience - Displays fortitude when making unpopular decisions.</li><li>▪ Flexibility - Is open to change and new information; adapt behavior or work methods in response to new information, changing conditions, or unexpected obstacle; effectively deal with ambiguity.</li><li>▪ Accountability - Holds self and others accountable for measurable high-quality, timely, and cost-effective results. Determines objectives, sets priorities, and delegates work. Accepts responsibility for mistakes. Complies with established control systems and rules.</li></ul>	C1



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<ul style="list-style-type: none"> <li>Written Communication -Recognizes or uses correct English grammar, punctuation, and spelling; communicates information in a succinct and organized manner, produces written information that is appropriate for the intended audience.</li> <li>Customer Service -Works with customers to assess needs, provide assistance, resolve problems, satisfy expectations; knows products and services.</li> <li>Oral Communication- Expresses information to individuals or groups effectively, taking into account the audience and nature of the information; makes clear and convincing presentations, listens to others; attends to nonverbal cues.</li> </ul>	
<b>8 Communications Management</b> – Communicate needs and expectations for the project; how and in what format information will be communicated; when and where each communication will be made and who is responsible for providing each type of communication.	
Ability to share & communicate lessons learned.	C1
Ability to use correct and effective oral and written skills.	C1
Knowledge of the importance of the dissemination of information both internally and externally.	C1
Ability to demonstrate effective briefing skills.	C1
<b>9 Working Groups and Teams</b> – Persons who report either directly or indirectly to the project manager and who are responsible for performing project work as a regular part of their assigned duties.	
Knowledge of the functions of membership in a working group or project oriented team, including Integrated Product and Process Teams. Demonstrate knowledge of team development functions and the need to be: <ul style="list-style-type: none"> <li>Open in discussions</li> <li>Qualified to participate and an empowered team member</li> <li>Consistent, success-oriented, proactive in participation</li> <li>Continuous with “up-the-line” communications</li> <li>Reasoned in disagreement</li> <li>Active in offering issues and committed to their early resolution</li> </ul>	C1

<b>D1</b>	<b>Government Specific I</b> A minimum of 24 hours of coursework that is government-specific and enables the individual to: <ul style="list-style-type: none"> <li>Implement a process by which the efforts of all acquisition personnel are integrated through a comprehensive plan;</li> <li>Explain the need for the Project/Program Manager to participate in pre-award actions required by acquisition planning (FAR Part 7.1);</li> <li>Develop a comprehensive program specification and requirements statement that fully and correctly define the program;</li> <li>Formulate a source selection plan that allows for best value selection from competitive solicitations;</li> <li>Support contract administrative actions;</li> <li>Establish a negotiated baseline of performance;</li> <li>Oversee the application of Total Life Cycle Systems Management (TLCSM);</li> <li>Explain Management's Responsibility for Internal Control (OMB Circular A-123) and Capital Asset Planning (OMB exhibit 300).</li> </ul>
<b>14 Realistic or Operational Test and Evaluation (OT&amp;E)</b>	
Knowledge of the agency OT&E process.	D1
<b>Contracting:</b> Knowledge of the supervision, leadership and management processes/procedures involving the acquisition of supplies and services, construction, research and development; acquisition planning to include performance-based considerations; cost and price analysis; solicitation and selection of sources; preparation, negotiation, and award of contracts; all phases of contract administration; termination options and processes for closeout of contracts; legislation, policies, regulations, and methods used in contracting, and business and industry practices.	
<b>16 Contract Approach</b>	
Knowledge of a process by which the efforts of the PM and PCO and all other personnel responsible for an acquisition are integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost.	D1
<b>17 Prepare Requirements &amp; Support Documentation</b>	
Ability to participate in pre-award actions required by FAR Subpart 7.1 Acquisition Planning, and the remainder of FAR Parts 1-12 etc., considering key and complex contract terms and conditions for the solicitation.	D1
<b>18 Prepare &amp; Issue Solicitation</b>	
Knowledge of the process for formulating pre-award policies, FAR (if applicable) Parts 5 Publicizing Contract Actions, 13 Simplified Acquisition Procedures and 14, Sealed Bidding, etc.	D1



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<b>19 Perform Source Selection</b> - Source selection is the process used in competitive, negotiated contracting to select the proposal expected to result in the best value to the Government.	
Knowledge of the process for formulating a source selection plan that allows for best value selection from a competitive solicitation.	D1
Knowledge of the process for structuring a formal source selection process that is commensurate to the level of procurement action to include the Source Selection Evaluation Board, Source Selection Advisory Counsel/Committee, and Source Selection Authority.	D1
<b>20 Administer Contract</b> – The process of managing the contract and the relationship between the buyer and seller, reviewing and documenting how a seller is performing or has performed to establish required corrective actions and provide a basis for future relationships with the seller, managing contract related changes, and, when appropriate, managing the contractual relationship with the outside buyer of a project.	
Knowledge of how to support contract administrative actions.	D1
<b>21 Performance-based Service Agreements</b>	
Knowledge of how to negotiate for the required level of support at a cost consistent with available support funding.	D1
Ability to establish a negotiated baseline of performance with operational users, and the corresponding commercial and/or organic support providers.	D1
<b>Business, Cost Estimating &amp; Financial Management:</b> Knowledge of the forms of cost estimating, cost analysis, reconciliation of cost estimates, financial planning, formulating financial programs and budgets, budget analysis/execution, benefit-cost analysis, Earned Value Management (EVM), and other methods of performance measurement.	
<b>22 Business Financial Planning &amp; Management</b>	
Ability to oversee application of Total Life Cycle Systems Management (TLCSM), or a similar concept, which requires the PM to base major decisions on system-wide analyses and the Lifecycle consequences of those decisions, and on system performance and affordability.	D1
<b>23 Cost Estimating</b> – The process of developing an approximation of the cost of the resources needed to complete project activities.	
Knowledge of cost estimating processes, methods, techniques, analytical principles, data, confidence bands, specialized costing, application of OMB A-94, and management applications.	D1
<b>24 Earned Value Management (EVM)</b> - A <a href="#">project management</a> technique that measures forward progress objectively. EVM has the unique ability to combine measurements of technical performance (i.e., accomplishment of planned work), schedule performance (i.e., behind/ahead of schedule), and cost performance (i.e., under/over budget) within a single integrated methodology. EVM provides an early warning of performance problems while there is time for corrective action. In addition, EVM improves the definition of <a href="#">project scope</a> , prevents <a href="#">scope creep</a> , communicates objective progress to <a href="#">stakeholders</a> , and keeps the <a href="#">project team</a> focused on achieving progress.	
<b>25 Financial Reporting &amp; Oversight</b>	
<b>26 Dept/Agency Programming, Planning and Budgeting Type System (OMB A-11)</b> – Provide guidance on preparing the FY Budget submission and include instructions on budget execution.	
Knowledge of how to allocate funds within appropriation categories and how to use the funds from each appropriation.	D1
Knowledge of the Department/Agency's policy/instructions for financial planning, programming, budget development, and budget execution, OMB A-11 application, including the documentation processes, which are employed in the development and decision making of a Department/Agency's total federal fiscal activity for a given fiscal period.	D1





### E1 Earned Value Management and Cost Estimates I

A minimum of 24 hours in Earned Value Management (EVM) and cost estimates that enables the individual to:

- Describe EVM policies, methodologies, and software for performance measurement of programs;
- Identify management techniques;
- Explain the need for an Integrated Baseline Review process;
- Allocate funds within appropriation categories and use the funds from each appropriation correctly;
- Demonstrate the use of the information system for financial management reporting;
- Explain cost estimating processes, methods, techniques, analytical principles, data, confidence bands, specialized costing, application of OMB A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*, and management applications.

**24 Earned Value Management (EVM)** - A [project management](#) technique that measures forward progress objectively. EVM has the unique ability to combine measurements of technical performance (i.e., accomplishment of planned work), schedule performance (i.e., behind/ahead of schedule), and cost performance (i.e., under/over budget) within a single integrated methodology. EVM provides an early warning of performance problems while there is time for corrective action. In addition, EVM improves the definition of [project scope](#), prevents [scope creep](#), communicates objective progress to [stakeholders](#), and keeps the [project team](#) focused on achieving progress.

Knowledge of earned value management (EVM) policies, methodologies, and software for performance measurement of programs.

E1

Knowledge of the Integrated Baseline Review (IBR) process.

E1

Knowledge of techniques used to determine effective program strategies when EVM indicators are yellow and/or red or cross a threshold.

E1

### 27 Leadership/Professional Skills

These competencies comprise a foundation for effective entry-level program/project manager-related responsibilities:

- *Problem Solving* -Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and make recommendations.
- *Conflict Management* -Manages and resolves conflicts, grievances, confrontations, or disagreements in a constructive manner to minimize negative personal impact.
- *Interpersonal Skills* - Shows understanding, courtesy, tact, empathy; develops and maintains relationships; deals with difficult people; relates well to people from varied backgrounds; is sensitive to individual differences.
- *Resilience* - Displays fortitude when making unpopular decisions.
- *Flexibility* - Is open to change and new information; adapt behavior or work methods in response to new information, changing conditions, or unexpected obstacle; effectively deal with ambiguity.
- *Accountability* - Holds self and others accountable for measurable high-quality, timely, and cost-effective results. Determines objectives, sets priorities, and delegates work. Accepts responsibility for mistakes. Complies with established control systems and rules.
- *Written Communication* -Recognizes or uses correct English grammar, punctuation, and spelling; communicates information in a succinct and organized manner, produces written information that is appropriate for the intended audience.
- *Customer Service* -Works with customers to assess needs, provide assistance, resolve problems, satisfy expectations; knows products and services.
- *Oral Communication* - Expresses information to individuals or groups effectively, taking into account the audience and nature of the information; makes clear and convincing presentations, listens to others; attends to nonverbal cues.

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B1,  
C1,  
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E1